

# National Weather Service Storm Data and Unusual Weather Phenomena



Time Path Path Number of Estimated February 2000

Local/ Length Width Persons Damage

Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

#### **HAWAII**

HIZ003-005>008

Kauai Leeward - Oahu South Shore - Waianae Coast - Oahu North Shore - Oahu Koolau

01 0000HST 0 0 Drought

February 2000 proved to be one of the driest Februarys since 1983 when Hawaii was in the midst of an El Nino-induced drought. This despite the presence of a La Nina in the Pacific, which has been loosely correlated to wetter than normal conditions in the state. All 73 first-order and hydronet sites reported rain totals at less than 50 percent of the February average, and 69 sites were less than 20 percent of average.

In terms of the synoptic scale pattern, the month began with a cold front pushing toward the islands from the northwest. As the front approached the state, the subtropical ridge moved southward over the island of Hawaii. The front stalled north of Kauai on 3 February before dissipating and did not produce significant rainfall over the island chain. The subtropical ridge straddled the islands through 7 February before moving northward, restoring trade wind flow over the state. However, trade wind strength remained in the light to moderate range through 17 February, after which it strengthened to moderate to fresh. Throughout the period from 1 to 17 February, mainly light winds allowed land- and sea-breeze circulations to become established over all the islands, though the air mass was too stable to allow for significant shower development.

The remainder of the month saw persistent trade winds, mostly in the moderate to fresh range with occasional periods of strong trades. Upper level ridging and its attendant subsidence near the state, however, kept conditions very stable and relatively dry

#### Maui County

All of Maui County's gages reported less than one inch of rain for the month. These totals were less than 10 percent of average at 12 out of 15 gages. Four sites (Waikapu, Pukalani, Kihei, and Kula) reported zero rainfall for February. The first-order station at Kahului Airport recorded 0.06 of an inch in February and broke an all-time low monthly rainfall record (0.07 of an inch) last set in 1983. For the hydronet site at Hana Airport, the monthly total of 0.61 of an inch broke the record of 0.88 (1978) from the co-located cooperative observer rain gage. While the hydronet value is considered unofficial, the cooperative observer's total should break the record as well. A similar situation occurred at Lanai City where the hydronet total of 0.32 of an inch broke the cooperative gage record of 0.36 set in 1931.

### Island of Hawaii

January and February 2000 rainfall totals for the island of Hawaii were as different as night and day. Back in January, 9 out of 19 sites reported above average totals, with 6 of 9 being greater than 150 percent of average. In February, all sites were below normal, with 15 out of 19 having totals less than 10 percent of average. The most dramatic change was at the Waiakea Uka gage where the January total of 24.89 inches was followed by a February total of 0.47. The first-order site at Hilo Airport recorded a February total of 0.52 of an inch, which broke the previous low record of 0.58 set in 1986.

Conditions for agriculture on the leeward side of the island continued to deteriorate, and impacts to pastures and orchards in the area were increasing in severity. According to agriculture officials, cool temperatures have helped reduce the effects of the rainfall deficits. However, with the warm summer months looming on the horizon, a continued lack of precipitation will result in greater and more widespread drought damage.

The following list contains rainfall statistics for selected locations from Maui County and the island of Hawaii. The first column is the observed rainfall for February. The second column is the 30-year average for that location, while the third column lists the percent of average rainfall for the month. The fourth and fifth columns are the year-to-date total and the percent of average, respectively.

	Feb 00	Avia	0/ 4220	YTD	YTD
Maui	reb 00	Avg.	%Avg.	HD	%Avg.
Kahului	0.06	2.90	2	1.06	1 5
Hana	0.61	6.80	9	6.94	43
Kihei	0.00	2.20	0	0.03	0
Lahainaluna	0.02	2.70	1	0.16	2
Wailuku	0.12	3.80	3	2.33	26
Kula	0.00	3.70	0	1.19	14
Ulupalakua	0.14	4.40	3	0.66	7
Molokai					
Kaunakakai	0.27	2.60	10	0.70	12

Lanai



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Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured	Estimated Damage Property Crops	February 2000 Character of Storm		
<u>HAWAII</u>									
	Lanai	City	0.32	4.10	8	0.99	10		
		of Hawaii	0.52	10.20	_	10.20	0. 1		
	Pahala	Airport	0.52 1.05	10.30 6.10	5 17	18.39 2.11	9 1 1 5		
	Honai		0.36	3.20	11	1.43	21		
		iela (Upper)	0.50	5.10	10	10.35	9 1		
	Glenv		1.03	14.50	7	24.09	7 3		
		ahoehoe	0.10	13.20	1	21.10	7 9		
	Kama		0.00	2.30	0	0.07	1		
	Kapar		0.93	6.60	14	2.21	16		
HIZ001>007	went from the Uranche \$100,0	J.S. Farm Services-those with an	own in one mor ice Agency sa inual revenue o	nth's time. aid it had 27 ver \$2.5 million	ranches applying on—are not eligible,	for federal grants to but even the smaller	ied up again in February. Fields literal o pay for drought losses. The large ranches were reporting losses as high a		
	07 08	0900HST 1700HST			0 0		High Surf		
			far northwest	of Hawaii prod	duced surf of 8 to 12	feet along the north	and northwest shores of all the islands		
HIZ001>007			ward - Kauai l	Leeward - Ka		ahu South Shore - V	Vaianae Coast - Oahu North Shore		
	10 15	1000HST 0400HST			0 0		High Surf		
		A series of storm lows far northwest of the state generated surf of 15 to 18 feet along the north and northwest shores of all the Hawaiian Islands.							
HIZ001>007	Niihau	Niihau - Kauai Windward - Kauai Leeward - Kauai Mountains - Oahu South Shore - Waianae Coast - Oahu North Shore							
	19 21	0900HST 0600HST			0 0		High Surf		
	A serie	A series of storm lows far northwest of Hawaii caused surf of 15 to 20 feet along the north and northwest shores of all the islands							
HIZ001>007	Niihau	Niihau - Kauai Windward - Kauai Leeward - Kauai Mountains - Oahu South Shore - Waianae Coast - Oahu North Shore							
	25 26	0900HST 2200HST			0 0		High Surf		

A storm low far west of Hawaii generated surf of 8 to 12 feet along the north and west shores of all the isles.